Remote Diagnostic System (RDS)

USER MANUAL

Advanced Rail Controls Pvt. Ltd
Bangalore-560092

RELEASE - V 2.1
July– 2014

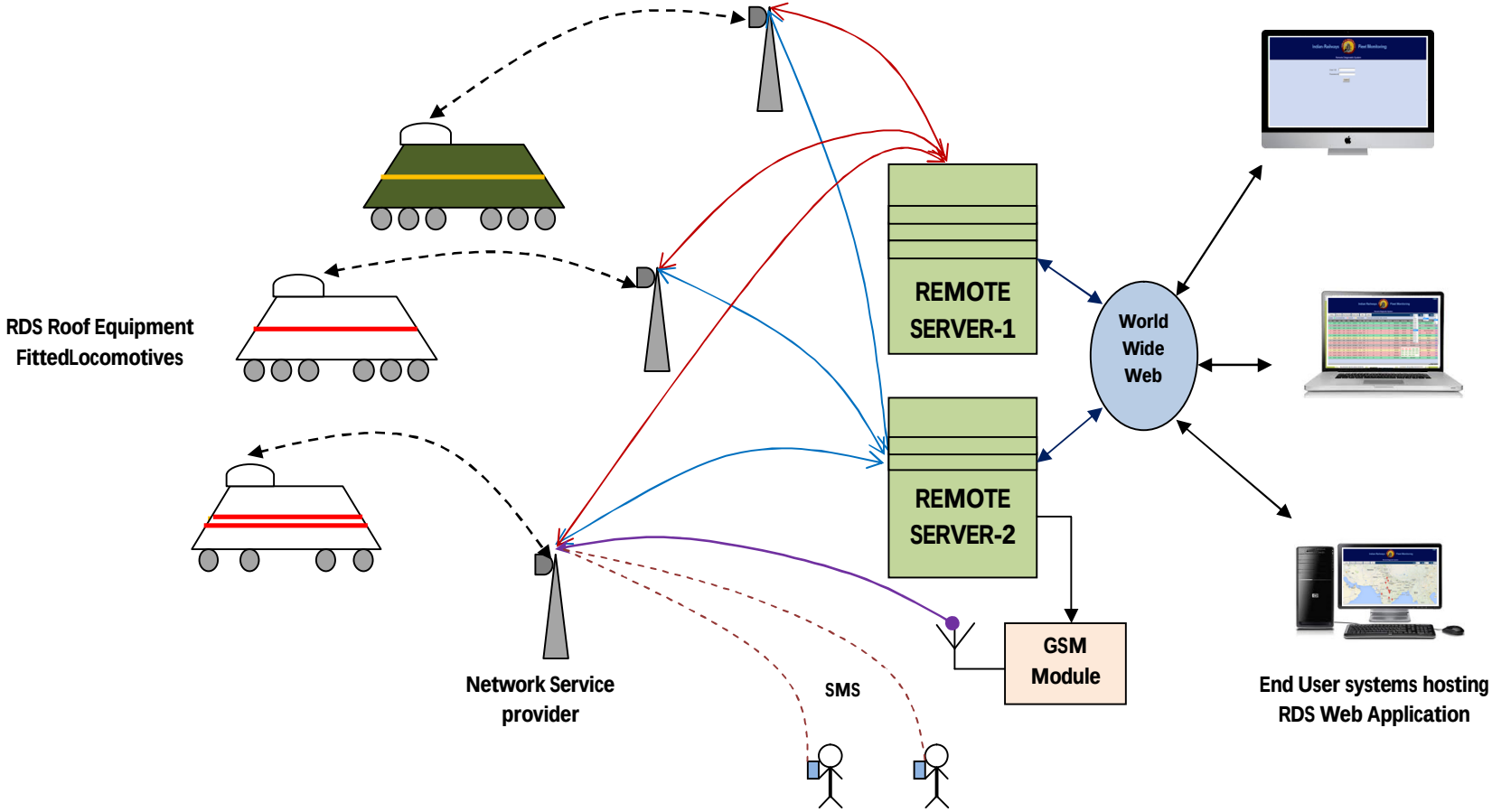
INDEX

CONTENTS		PAGE
1.0	INTRODUCTION	2
1.1	RDS WIRING DIAGRAM	3
1.2	BLOCK DIAGRAM	4
2.0	LOGIN	5
2.1	SHED SELECTION	6
2.2	THREE DIFFERENT THEMES	7
3.0	HOME PAGE	10
3.1	MAPVIEW	14
3.2	REAL TIME DATA	16
3.3	HISTORIC DATA	20
3.4	DDS	25

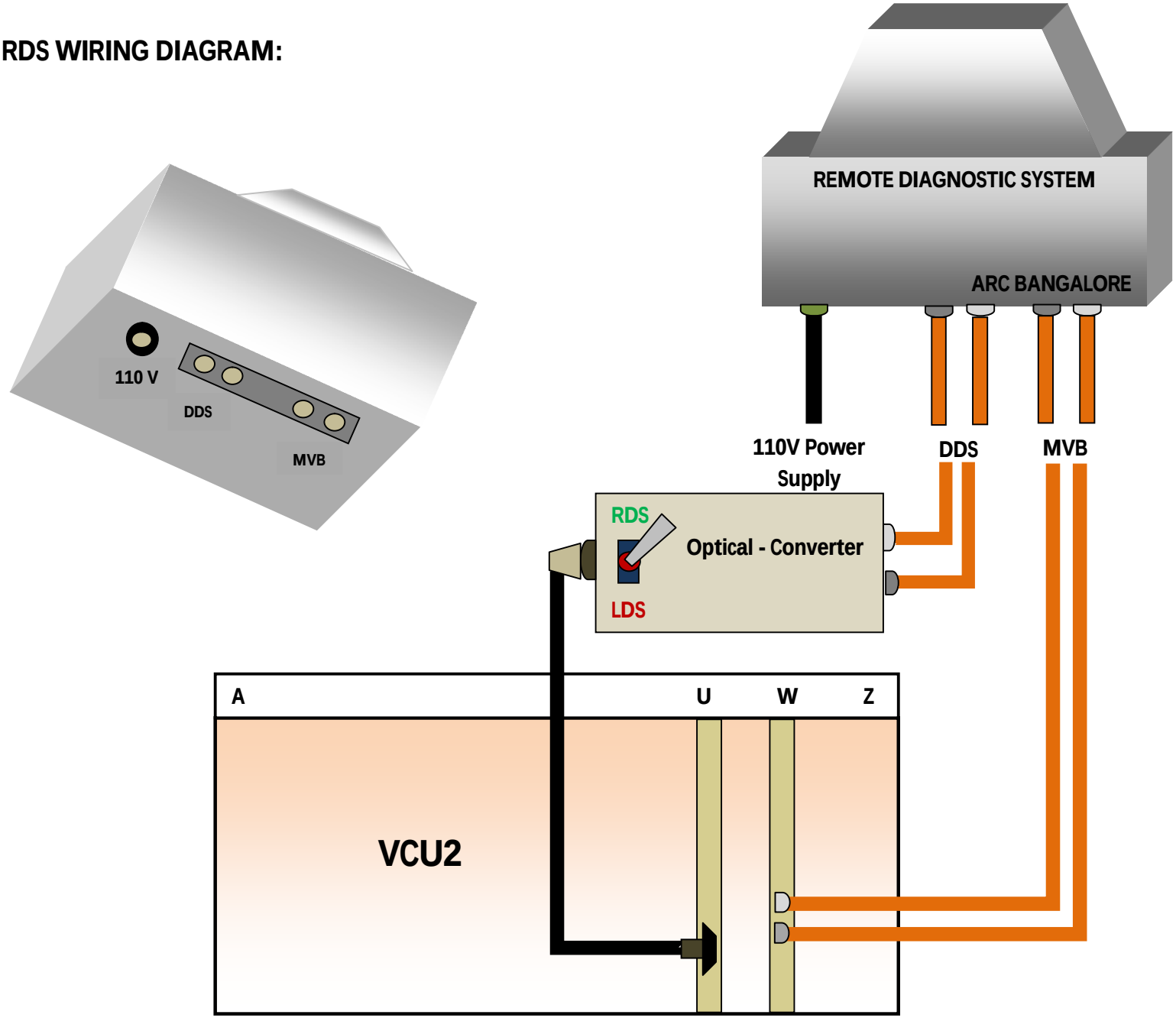
1.0 INTRODUCTION

The Remote Diagnostic system collects the status of the locomotive (**MVB** variables); faults developed in a running locomotive and transmit to the base station server (**Remote Server**) on real time on a wireless network along with the location of the loco. The equipment continuously polls the internal status of the locomotive and upon generation of any faults or system generated alerts, the same is captured and sent to base server. The equipment is MVB based which gets connected to the **WAP5/ WAP7/ WAG9/9H** class of locomotives running in Indian Railways. The function of the equipment can be extended to cater to any type of rolling stock. There is an associated roof mounted unit which houses multiple network interfacing devices (both **GSM & CDMA** each) and a **GPS** receiver. Many process variables of the locomotive can be captured through MVB and transmitted to base station.

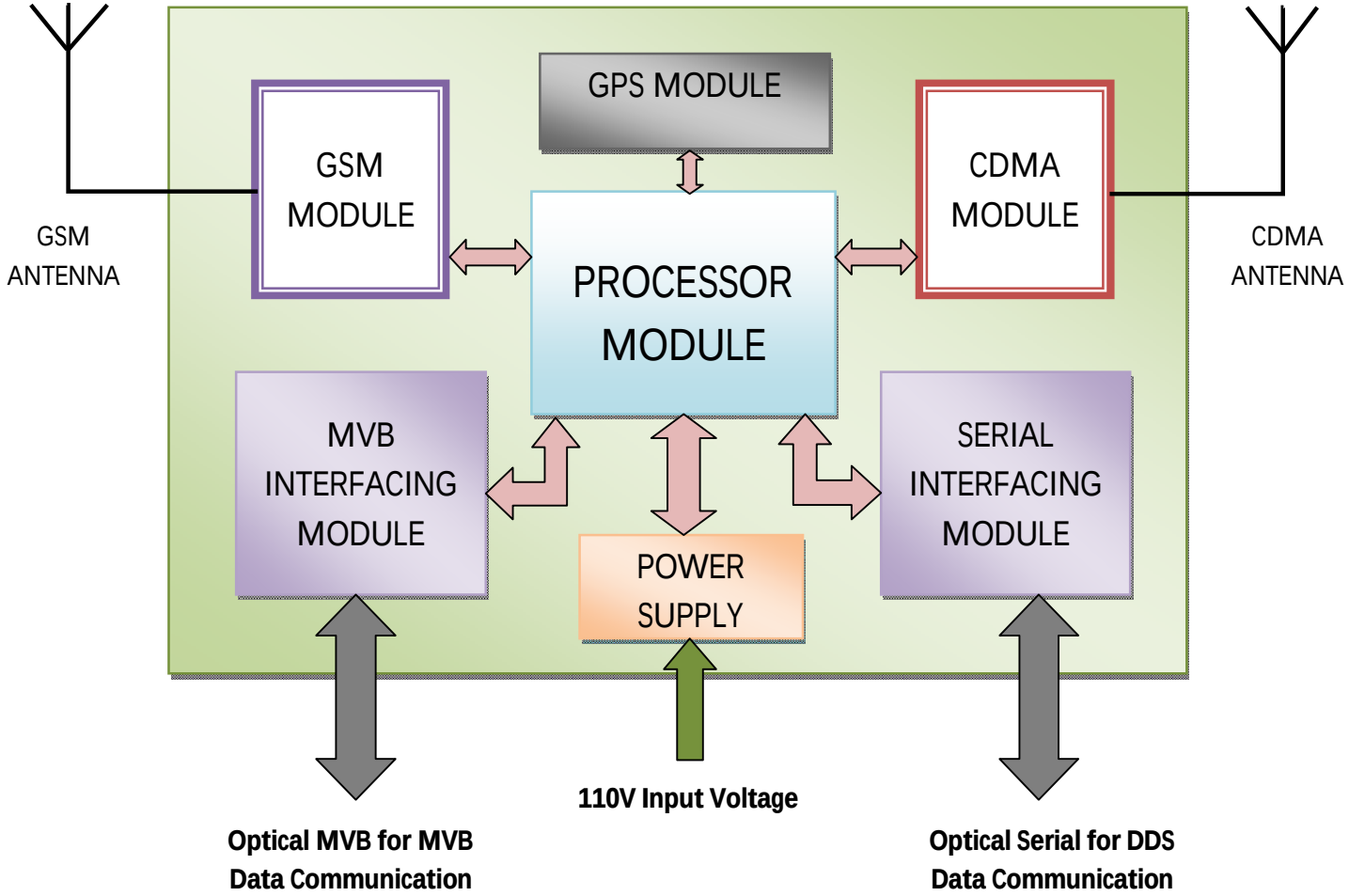
The user can view the status of locomotive by logging on to www.irfleetmonitor.in



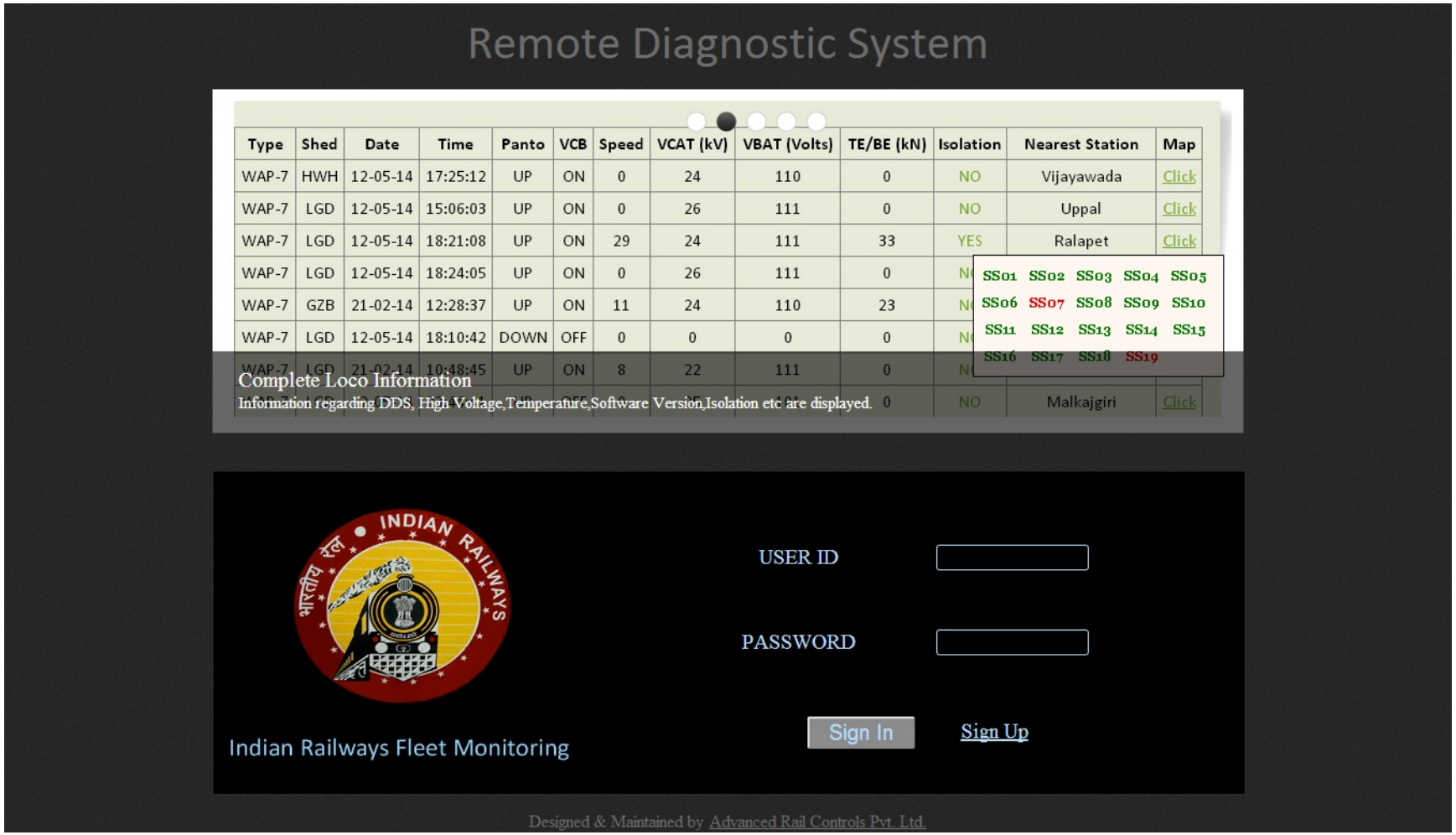
1.1 RDS WIRING DIAGRAM:



1.2 BLOCK DIAGRAM:

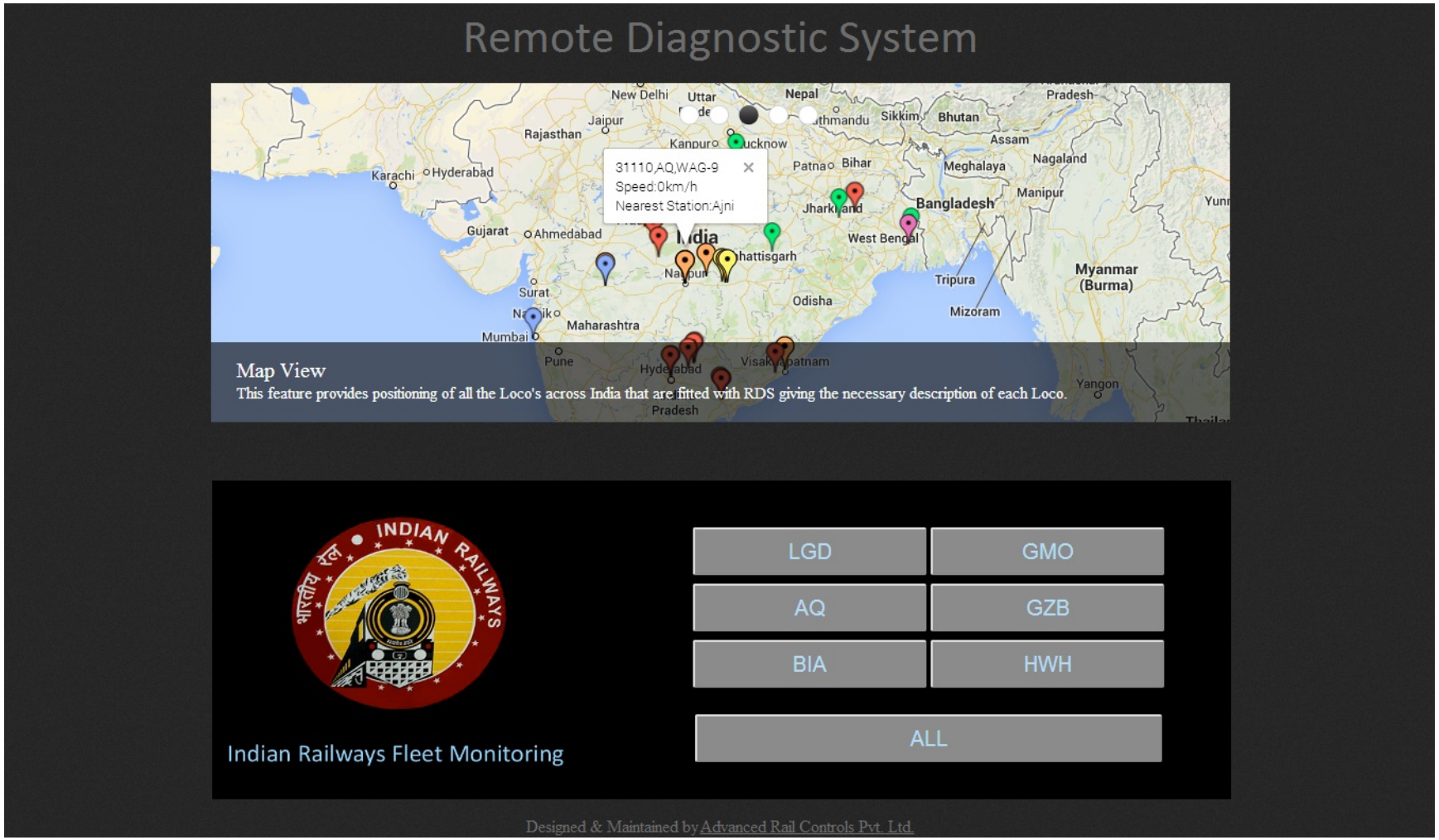


2.0 LOGIN PAGE



Login page has User Id and password fields which have to be entered. On clicking Sign In button with the correct User Id and Password,the page gets redirected to **SHED SELECTION** page.
On clicking Sign Up link, page gets redirected to **REGISTER** page where personal registration can be done.

2.1 SHED SELECTION

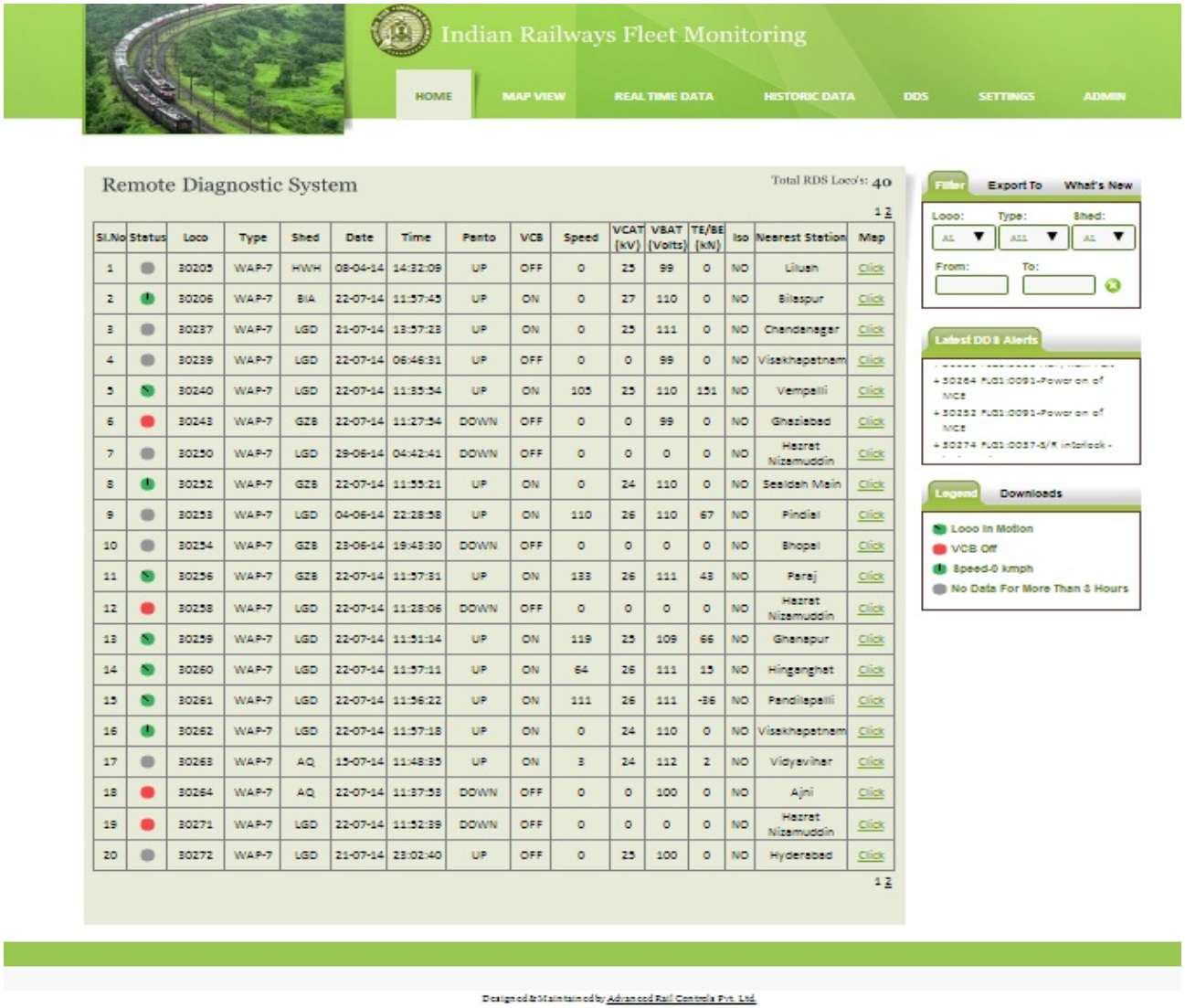


Here on clicking the required shed, page gets redirected to default page with selected shed details.

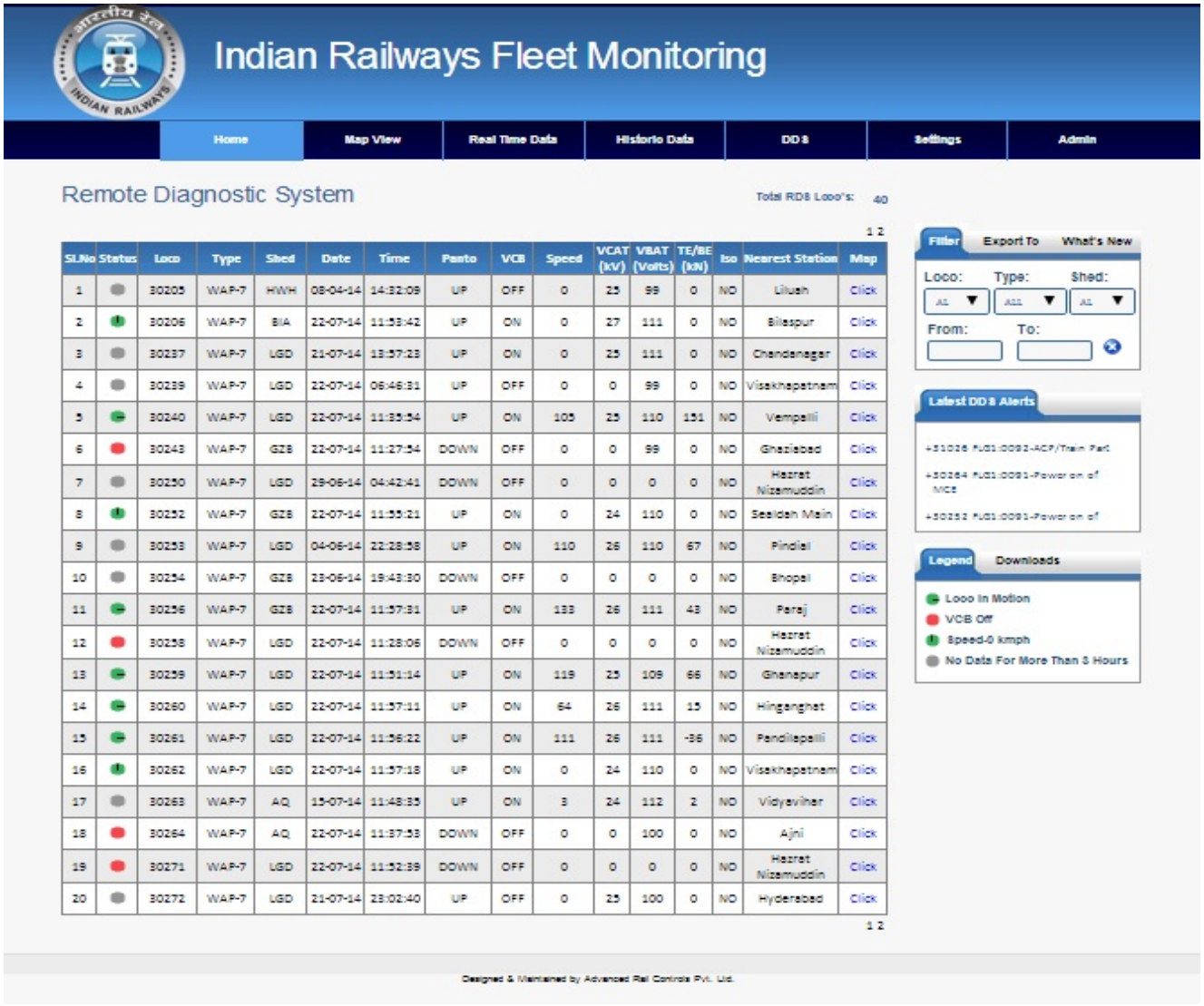
2.2 THREE DIFFERENT THEMES

BLACK DIAMOND

DURONTO GREEN



SHATABDI BLUE

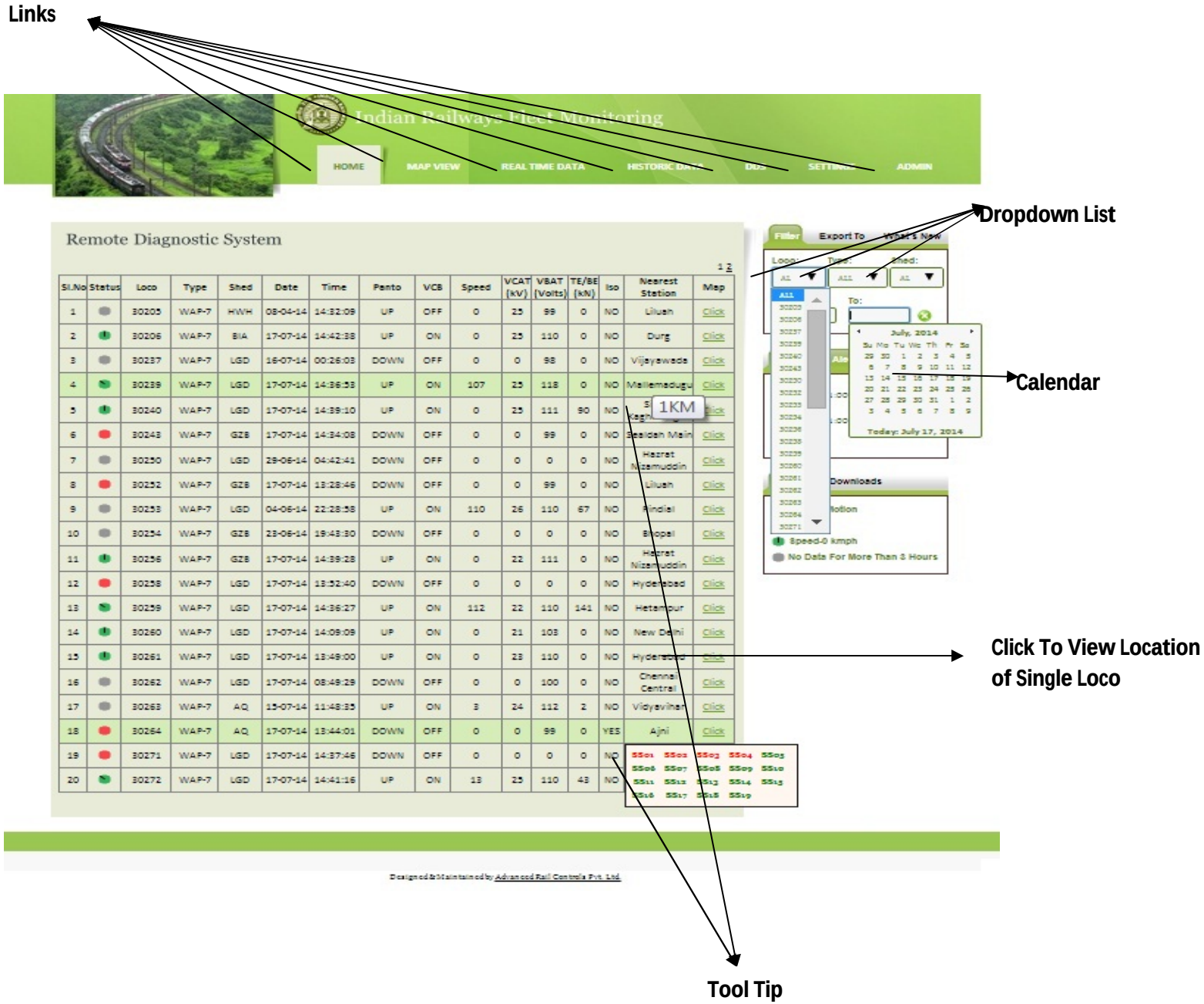


Sl.No	Status	Loco	Type	Shed	Date	Time	Panto	VCB	Speed	VCAT (kV)	VBAT (Volts)	TE/BE (kN)	Iso	Nearest Station	Map
1		30205	WAP-7	HWH	08-04-14	14:32:09	UP	OFF	0	25	99	0	NO	Liluah	Click
2		30206	WAP-7	BIA	22-07-14	11:53:42	UP	ON	0	27	111	0	NO	Bilaspur	Click
3		30237	WAP-7	LGD	21-07-14	13:57:23	UP	ON	0	25	111	0	NO	Chandanagar	Click
4		30239	WAP-7	LGD	22-07-14	06:46:31	UP	OFF	0	0	99	0	NO	Visakhapatnam	Click
5		30240	WAP-7	LGD	22-07-14	11:35:54	UP	ON	105	25	110	151	NO	Vempalli	Click
6		30243	WAP-7	GZB	22-07-14	11:27:54	DOWN	OFF	0	0	99	0	NO	Ghaziabad	Click
7		30250	WAP-7	LGD	29-06-14	04:42:41	DOWN	OFF	0	0	0	0	NO	Hazrat Nizamuddin	Click
8		30252	WAP-7	GZB	22-07-14	11:55:21	UP	ON	0	24	110	0	NO	Sealdah Main	Click
9		30253	WAP-7	LGD	04-06-14	22:28:58	UP	ON	110	26	110	67	NO	Pindial	Click
10		30254	WAP-7	GZB	23-06-14	19:43:30	DOWN	OFF	0	0	0	0	NO	Bhopal	Click
11		30256	WAP-7	GZB	22-07-14	11:57:31	UP	ON	133	26	111	43	NO	Paraj	Click
12		30258	WAP-7	LGD	22-07-14	11:28:06	DOWN	OFF	0	0	0	0	NO	Hazrat Nizamuddin	Click
13		30259	WAP-7	LGD	22-07-14	11:51:14	UP	ON	119	25	109	66	NO	Ghanapur	Click
14		30260	WAP-7	LGD	22-07-14	11:57:11	UP	ON	64	26	111	15	NO	Hingenghat	Click
15		30261	WAP-7	LGD	22-07-14	11:56:22	UP	ON	111	26	111	-36	NO	Pendlepalli	Click
16		30262	WAP-7	LGD	22-07-14	11:57:18	UP	ON	0	24	110	0	NO	Visakhapatnam	Click
17		30263	WAP-7	AQ	15-07-14	11:48:35	UP	ON	3	24	112	2	NO	Vidyavihar	Click
18		30264	WAP-7	AQ	22-07-14	11:37:53	DOWN	OFF	0	0	100	0	NO	Ajni	Click
19		30271	WAP-7	LGD	22-07-14	11:52:39	DOWN	OFF	0	0	0	0	NO	Hazrat Nizamuddin	Click
20		30272	WAP-7	LGD	21-07-14	23:02:40	UP	OFF	0	25	100	0	NO	Hyderabad	Click

1 2

Three different themes are provided to let user view rest of the contents from these themes of his choice.

3.0 HOME PAGE


Links
Indian Railways Fleet Monitoring
HOME
MAP VIEW
REAL TIME DATA
HISTORIC DATA
DLIS
SETTINGS
ADMIN
Remote Diagnostic System
Dropdown List
Calendar
1KM
Click To View Location of Single Loco
Tool Tip
Designed & Maintained by Advanced Rail Controls Pvt. Ltd.

Home (Default) Page has

Links namely Home, Map View, Real Time Data, Historic Data, DDS, Settings and Admin.

On clicking Home link, the page gets redirected to **HOME** page.

On clicking Map View link, the page gets redirected to **MAP VIEW page**.

On mouse over the **REAL TIME DATA** link, dropdown with the following real time links appear from which required link can be clicked:

HIGH VOLTAGE CIRCUIT
TRCTION CONVERTER
TRACTION MOTORS
AUXILIARY CONVERTER
AUXILIARY MACHINES
TRACTION/BRAKING
TEMPERATURE
PRESSURE
SUBSYSTEM
ENERGY
S/W VERSION
MAX VALUE

On clicking Historic Data link, the page gets redirected to **HISTORIC DATA** page.

On clicking DDS button, the page gets redirected to **DDS** page and on mouse over the DDS link, a dropdown with the following links appear from which required link can be clicked:

DDS
GLOBAL HITLIST
DDS ANALYSIS

On mouse over the **SETTING** link, dropdown with the following links appear from which required link can be clicked:

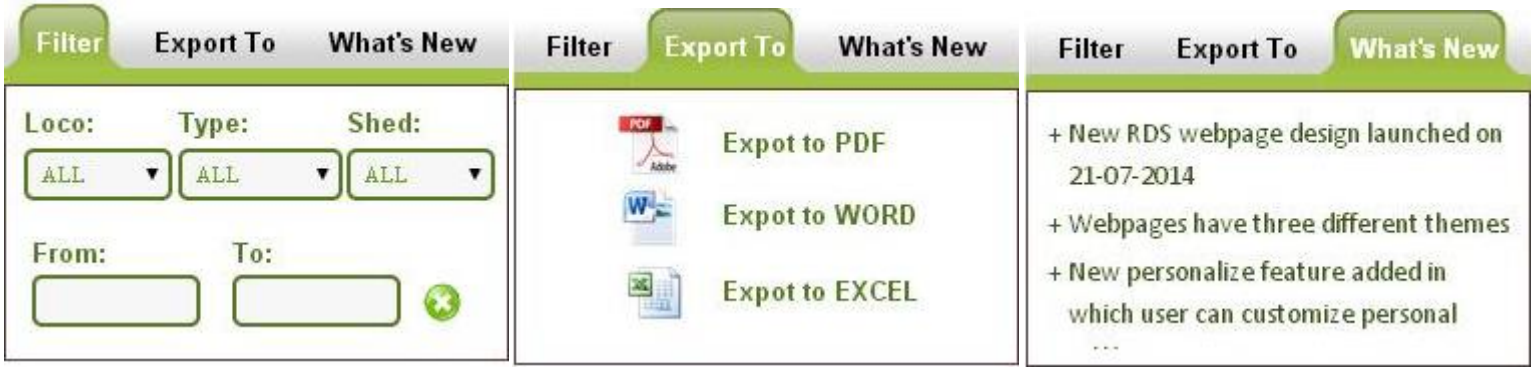
PERSONALIZE
THEMES -> SHATABDI BLUE, DURONTO GREEN, BLACK DIAMOND.
LOGOUT

On clicking Admin link, the page gets redirected to **ADMIN** page.

When the mouse hovers over the Isolation field, small window (tooltip) appears indicating which subsystem is isolated, also for nearest station field tool tip appears indicating the distance between loco and its nearest station in km. Each row in the table gets highlighted when mouse is over the row.

THREE TABS

All the pages have three tabs:

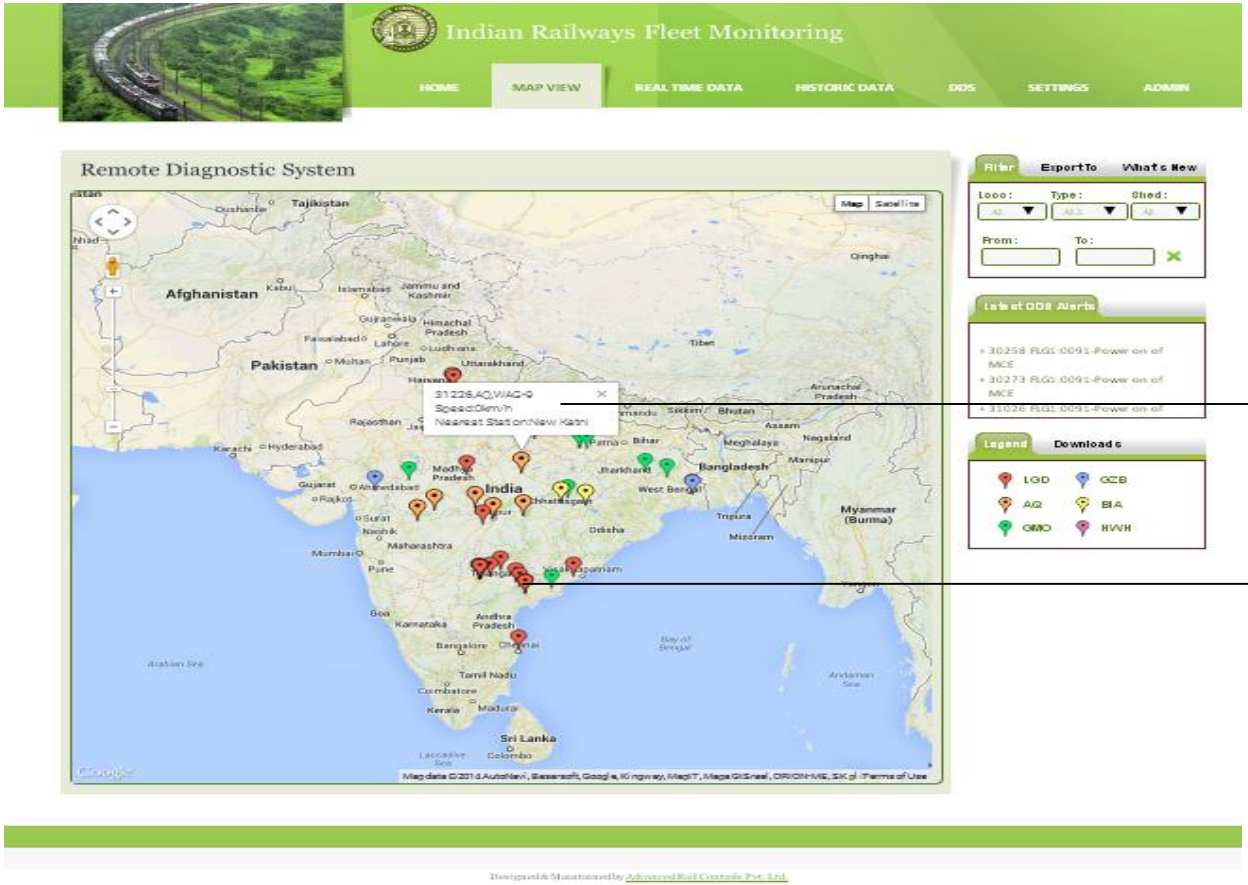


FIRST TAB contains three panels->**FILTER** panel contains the Loco Dropdown List which has loco list, Type Dropdown List which has type list, Shed Dropdown List which has shed list and two Date picker fields when clicked displays a calendar from which from and to dates can be selected. **EXPORT TO** panel contains three Image buttons: PDF which when clicked downloads the file in pdf format, WORD which when clicked downloads the file in word format, and EXCEL which when clicked downloads the file in excel format. **WHAT's NEW** panel contains the latest updates in RDS WebPages.

SECOND TAB contains one panel->**LATEST DDS ALERTS** panel contains latest 5 DDS alert messages.

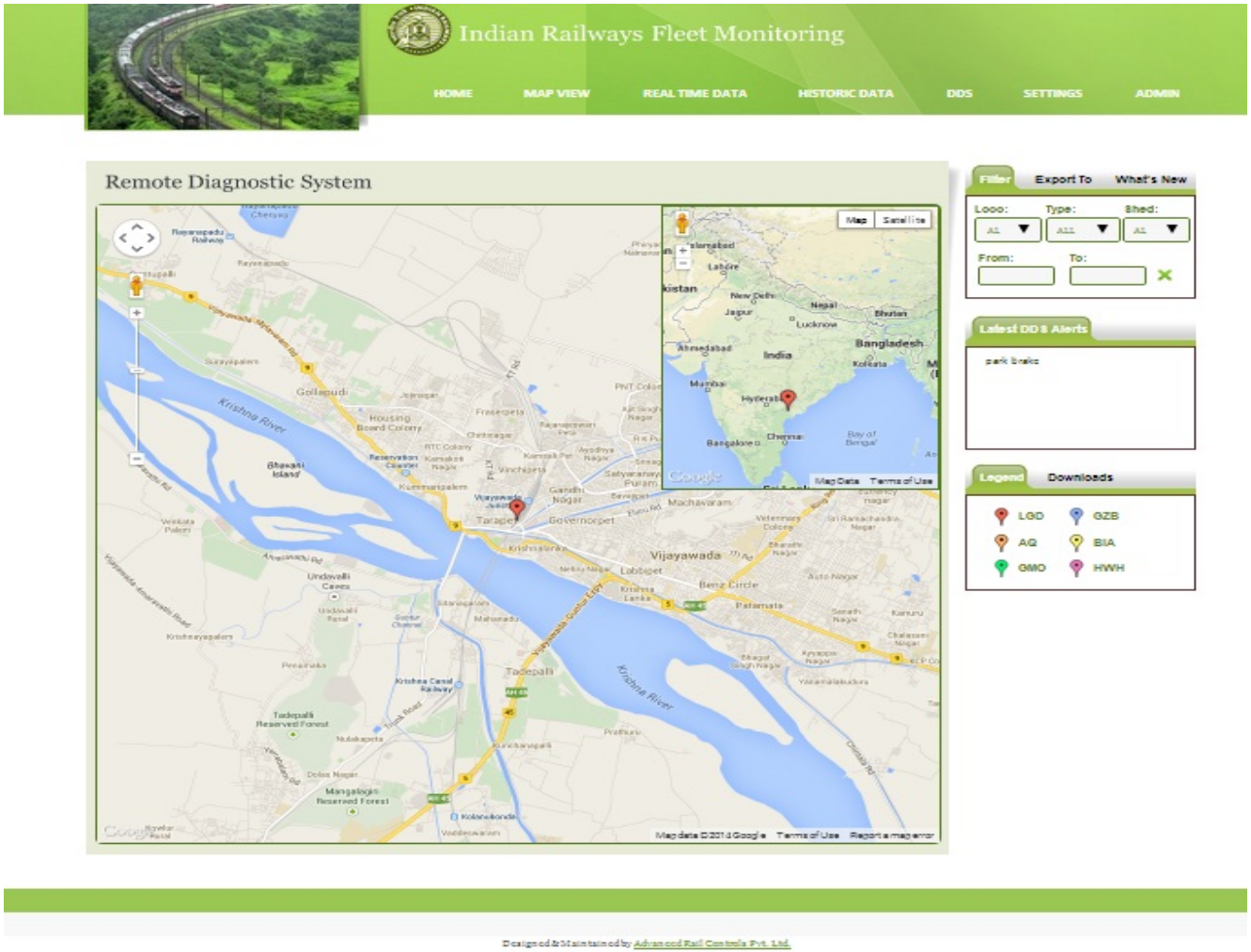
THIRD TAB contains two panels->**LEGEND** panel contain images that indicate status of the loco. Moving green image indicates that Loco is in motion. Red image indicates that VCB is OFF. Green image indicates that speed is 0kmph and Grey image indicates that there is no data for more than three hours for loco. **DOWNLOADS** panel contains user manual link from which user manual for RDS webpage can be downloaded and viewed in PDF format, Android App link which redirects to the RDS Android application.

3.1 MAPVIEW PAGE



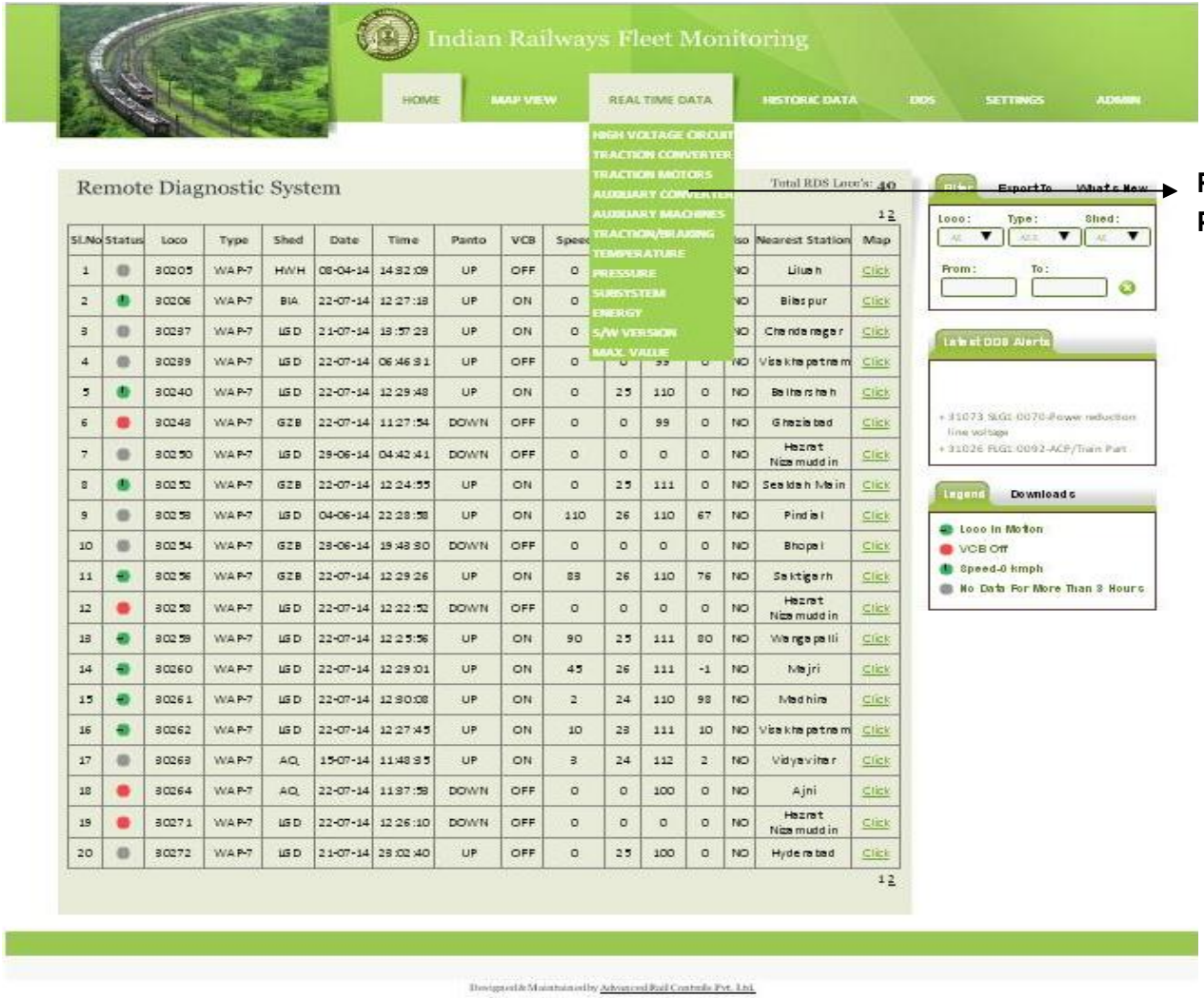
Map View Page contains map which displays the position of every loco. When the mouse is clicked over the loco indicator, small information window appears with its respective loco, speed and nearest station details. When mouse is over the loco indicator, a tooltip with its loco number appears. **LEGEND** panel of third tab contains images that indicate which shed each loco indicator belongs to. Red indicates LGD. Blue indicates GZB. Orange indicates AQ. Yellow indicates BIA. GREEN indicates GMO. Pink indicates HWH.

LOCATION MAPVEW PAGE



Location Map View Page has map which displays the position of selected loco from the Home page.

3.2 REAL TIME DATA



Sl.No	Status	Loco	Type	Shed	Date	Time	Panto	VCB	Speed					Nearest Station	Map
1		30205	WAP-7	HWH	08-04-14	14:32:09	UP	OFF	0				NO	Liluah	Click
2		30206	WAP-7	BIA	22-07-14	12:27:18	UP	ON	0				NO	Bilaspur	Click
3		30237	WAP-7	LGD	21-07-14	19:57:23	UP	ON	0				NO	Chandanagar	Click
4		30239	WAP-7	LGD	22-07-14	06:46:31	UP	OFF	0	0	99	0	NO	Visakhapatnam	Click
5		30240	WAP-7	LGD	22-07-14	12:29:48	UP	ON	0	25	110	0	NO	Balharshah	Click
6		30248	WAP-7	GZB	22-07-14	11:27:54	DOWN	OFF	0	0	99	0	NO	Ghaziabad	Click
7		30250	WAP-7	LGD	29-06-14	04:42:41	DOWN	OFF	0	0	0	0	NO	Hazrat Nizamuddin	Click
8		30252	WAP-7	GZB	22-07-14	12:24:55	UP	ON	0	25	111	0	NO	Sealdah Main	Click
9		30258	WAP-7	LGD	04-06-14	22:28:58	UP	ON	110	26	110	67	NO	Pindial	Click
10		30254	WAP-7	GZB	28-06-14	19:48:30	DOWN	OFF	0	0	0	0	NO	Bhopal	Click
11		30256	WAP-7	GZB	22-07-14	12:29:26	UP	ON	89	26	110	76	NO	Saktigarh	Click
12		30258	WAP-7	LGD	22-07-14	12:22:52	DOWN	OFF	0	0	0	0	NO	Hazrat Nizamuddin	Click
13		30259	WAP-7	LGD	22-07-14	12:25:56	UP	ON	90	25	111	80	NO	Wangapalli	Click
14		30260	WAP-7	LGD	22-07-14	12:29:01	UP	ON	45	26	111	-1	NO	Majri	Click
15		30261	WAP-7	LGD	22-07-14	12:30:08	UP	ON	2	24	110	98	NO	Madhira	Click
16		30262	WAP-7	LGD	22-07-14	12:27:45	UP	ON	10	28	111	10	NO	Visakhapatnam	Click
17		30269	WAP-7	AQ	15-07-14	11:48:35	UP	ON	3	24	112	2	NO	Vidyavihar	Click
18		30264	WAP-7	AQ	22-07-14	11:37:58	DOWN	OFF	0	0	100	0	NO	Ajni	Click
19		30271	WAP-7	LGD	22-07-14	12:26:10	DOWN	OFF	0	0	0	0	NO	Hazrat Nizamuddin	Click
20		30272	WAP-7	LGD	21-07-14	23:02:40	UP	OFF	0	25	100	0	NO	Hyderabad	Click

Real Time Data has links such as:

HighVoltageCircuit	On clicking HighVoltageCircuitlink, the page gets redirected to **HighVoltageCircuit**Page
Traction Converter	On clicking Traction Converterlink, the page gets redirected to**Traction Converter** Page
Traction Motors	On clicking Traction Motorslink, the page gets redirected to **Traction Motors**Page
Auxiliary Converter	On clicking Auxiliary Converterlink, the page gets redirected to **Auxiliary Converter** Page
Auxiliary Machines	On clicking Auxiliary Machineslink, the page gets redirected to **Auxiliary Machines** Page
Traction/Braking	On clicking Traction/Brakinglink, the page gets redirected to **Traction/Braking** Page
Temperature	On clicking Temperaturelink, the page gets redirected to **Temperature** Page
Pressure	On clicking Pressurelink, the page gets redirected to **Pressure** Page
Subsystem	On clicking SubSystemlink, the page gets redirected to **SubSystem** Page
Energy	On clicking Energylink, the page gets redirected to **Energy** Page
S/W Version	On clicking S/W Version link, the page gets redirected to **S/W Version** Page
Max Value	On clicking Max Valuelink the page gets redirected to **Max Value** Page

REAL TIME DATA PARAMETERS

High Voltage Circuit	Traction Converter	Traction Motors	Auxiliary Converter	Auxiliary Machines	Traction /Braking	Temperature	Pressure	SubSystem	Energy	S/W Version	Max Value
Loco	Loco	Loco	Loco	Loco	Loco	Loco	Loco	Loco	Loco	Loco	Loco
Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
Shed	Shed	Shed	Shed	Shed	Shed	Shed	Shed	Shed	Shed	Shed	Shed
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
Panto	Panto	Panto	Panto	Panto	Panto	Panto	Panto	Panto	Panto	Panto	Panto
VCB	VCB	VCB	VCB	VCB	VCB	VCB	VCB	VCB	VCB	VCB	VCB
Speed (kmph)	Speed (kmph)	Speed (kmph)	Speed (kmph)	Speed (kmph)	Speed (kmph)	Speed (kmph)	Speed (kmph)	Speed (kmph)	Speed (kmph)	Speed (kmph)	Speed (kmph)
FLG Node	Node	FLG Node	FLG Node	FLG Node	FLG Node	FLG Node	FLG Node	FLG Node	FLG Node	FLG Node	FLG Node
Primary Current(A)	Input Contactor	DC Link Voltage (V)	Aux. Voltage (V)	Compressor	Active CAB	Transformer Oil Temperature (°C)	Transformer Oil Pressure (bar)	SS01-SS19	TE/BE Demand (kN)	FLG1	Catenary Voltage (V)
Primary Voltage(kV)	Pre Charging Contactor	Speed (rpm)	Aux. Current (A)	Oil Cooling Blower	Direction	Converter Oil Temperature (°C)	Converter Oil Pressure (bar)		Energy Consumed (kWh)	FLG2	Line Frequency (Hz)
Input Power(kW)	Oil Pressure (bar)	Temperature (°C)	DC Link Voltage (V)	Transformer Oil Pump	Throttle	Motor Temperature (°C)	MR Pressure (kg/cm2)		Energy Regenerated (kWh)	HBB1	Motor Temperature (°C)

Line Frequency (Hz)	Oil Temperature (°C)		DC Link Current (A)	Traction Motor Blower	TE/BE Demand (kN)		BP Pressure Demand (kg/cm2)		Regeneration Ratio	HBB2	Transformer Oil Temperature (°C)
TE/BE Demand (kN)	Ventilation Level		Output Voltage (V)	Machine Room Blower	TE/BE Actual (kN)		BC Pressure			STB1	Converter Oil Temperature (°C)
TE/BE Actual (kN)			Output Frequency (Hz)	Scavenge Blower	Pneumatic Brake Demand (%)					STB2	TE/BE Demand (kN)
			Grouping	BUR Status	Constant Speed					SLG1	TE/BE Actual (kN)
					Vigilance Brake					SLG2	

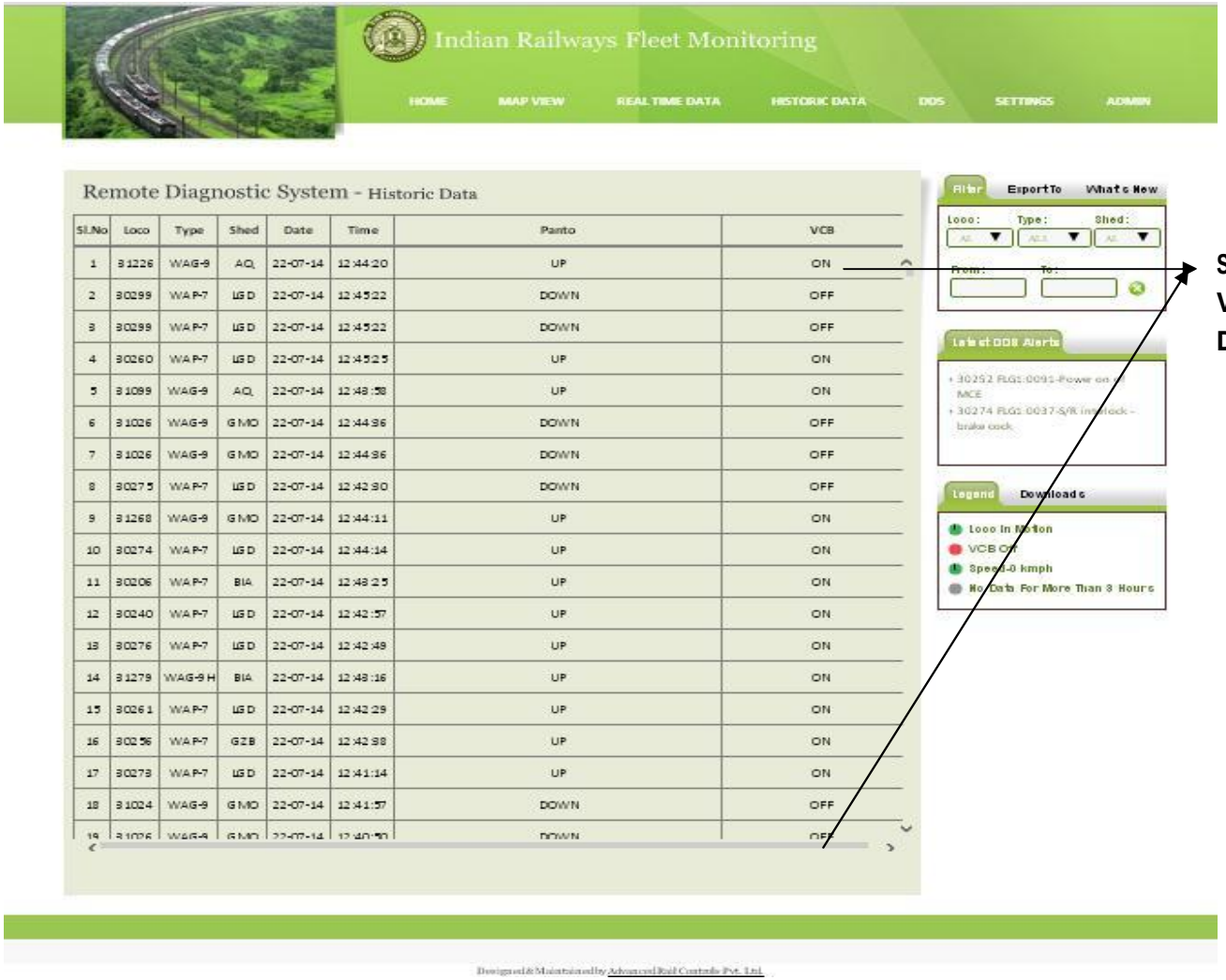
3.3 HISTORIC DATA PAGE

Historic Data Page contains various real time signal checkboxes which when ticked, appears along with a filter button. It has filter button which on clicking gets redirected to **FILTER** page. Only 15 Real Time Signals can be selected from the checkbox at once. If more than 15 Signals are selected, error message is displayed - "MAXIMUM LIMIT EXCEEDED!!!!!!!!".

It also has Checkbox List which contains REAL TIME SIGNALS such as:

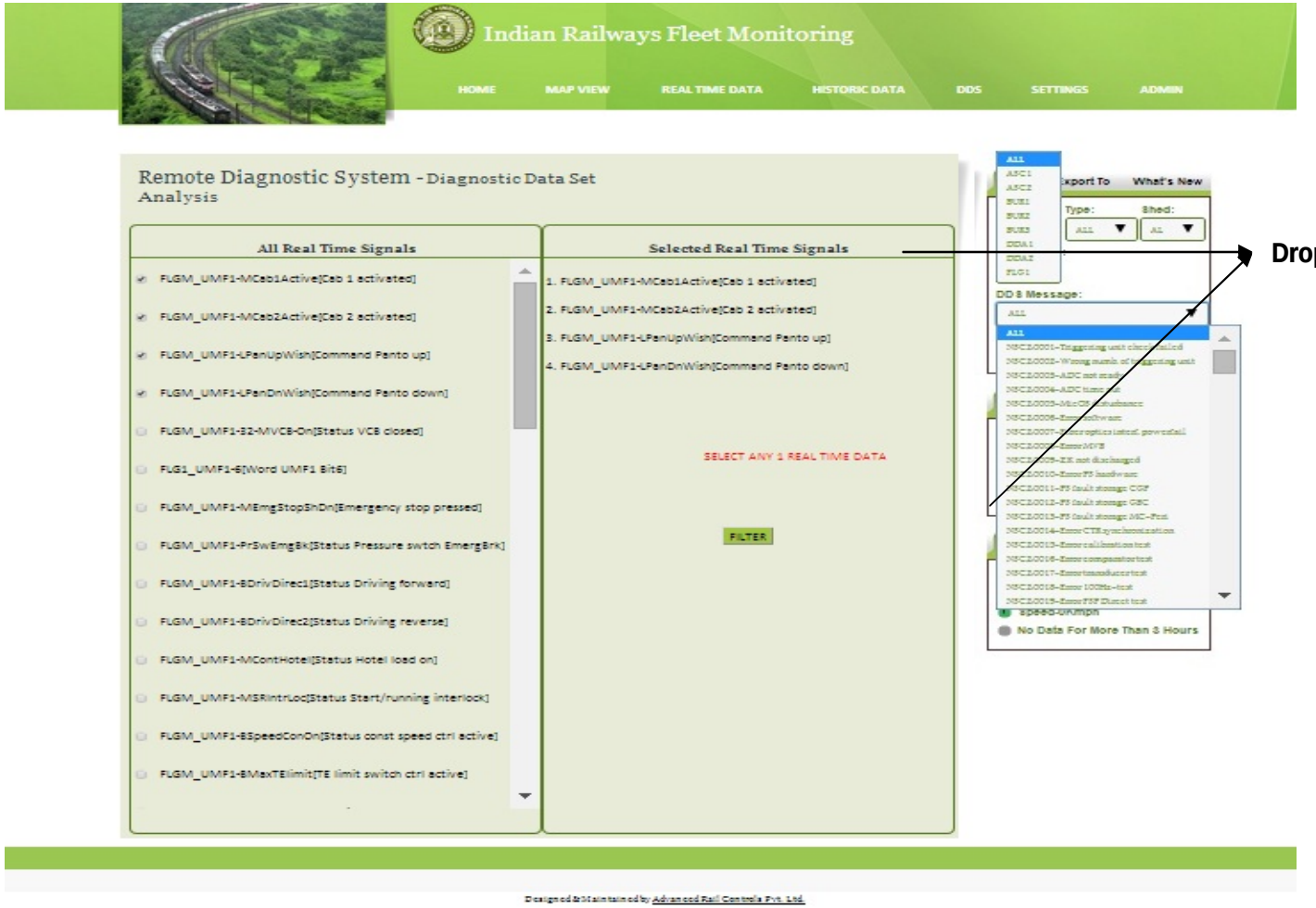
Speed	Panto	VCB	VCAT	VBAT	TE/BE
Loco Brake	Auto Brake	Parking Brake	FLG Node	Primary Current	Primary Voltage
Input Power	Line Frequency	TE/BE Actual	SLG1 Node	SLG2 Node	ALG1 Node
ALG2 Node	Input Contactor SR1	Input Contactor SR2	Pre Charging Contactor SR1	Pre Charging Contactor SR2	Oil Pressure SR1
Oil Pressure SR2	DC Link Voltage SR1	Oil Temperature SR1	Oil Temperature SR2	Ventilation Level SR1	Compresser1
Speed Bogie-1 TM1	DC Link Voltage SR2	Speed Bogie-1 TM2	Speed Bogie-1 TM3	Ventilation Level SR2	Compresser2
Speed Bogie-2 TM1	Speed Bogie-2 TM2	Speed Bogie-2 TM3	Temperature Bogie-1 TM3	Temperature Bogie-1 TM1	BUR Status BUR1
Aux. Voltage	Aux. Current	DC Link Voltage BUR1	Temperature Bogie-2 TM1	Temperature Bogie-1 TM2	BURStatusBUR2
Output Current BUR1	Grouping 52/1	DC Link Voltage BUR2	Temperature Bogie-2 TM2	Traction Motor Blower1	BURStatusBUR3
Output Current BUR2	Grouping 52/2	DC Link Voltage BUR3	Temperature Bogie-2 TM3	Traction Motor Blower2	ActiveCAB
Output Current BUR3	Grouping 52/3	DC Link Current BUR1	Converter Oil Pump SR1	Machine Room Blower1	Direction
Output Voltage BUR1	Grouping 52/4	DC Link Current BUR2	Converter Oil Pump SR2	Machine Room Blower2	Constant Speed
Output Voltage BUR2	Grouping 52/5	DC Link Current BUR3	Transformer Oil Pump1	Transformer Oil Temperature TR1	Vigilance Brake
Output Voltage BUR3	ThrottlePosition	TE_Demand(Boolean)	Transformer Oil Pump2	Transformer Oil Temperature TR2	S/W VER_HBB2
Oil Cooling Blower1	AngleTransmitter	BE_Demand(Boolean)	PneumaticBrakeDemand	Transformer Oil Pressure SR1	S/W VER_STB1
Oil Cooling Blower2	Scavenge Blower MR1	Scavenge Blower TM1	BP Pressure Demand	Transformer Oil Pressure SR2	S/W VER_STB2
TE/BE_Dem_1/3	Scavenge Blower MR2	Scavenge Blower TM2	Energy Regenerated	S/W VER_FLG2	S/W VER_SLG1
TE/BE_Dem_2/3	MR Pressure	Energy Consumed	S/W VER_FLG1	S/W VER_HBB1	S/W VER_SLG2

FILTER PAGE



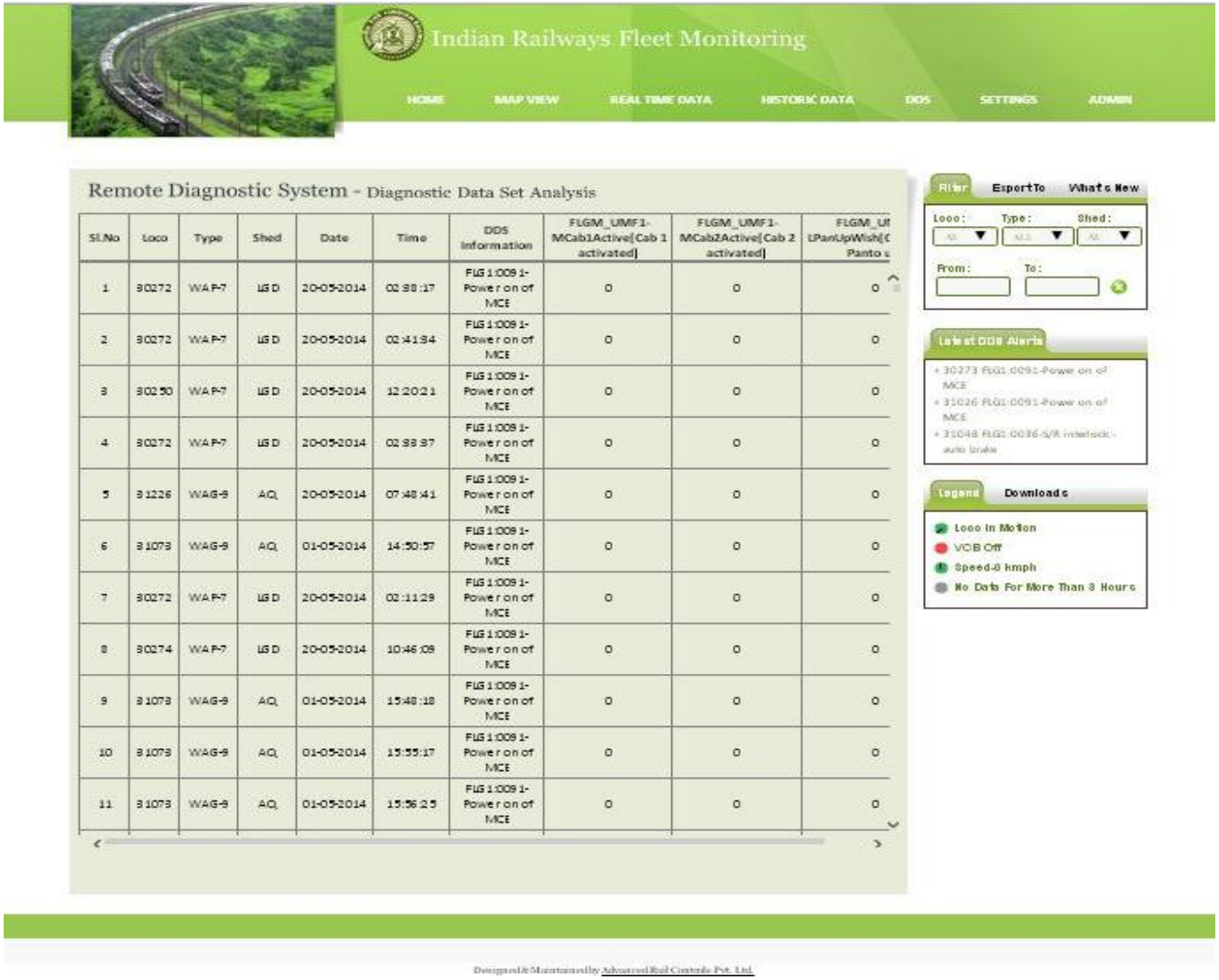
Filter Page displays details of selected real time signals from **HISTORIC DATA** page.

DDS ANALYSIS PAGE



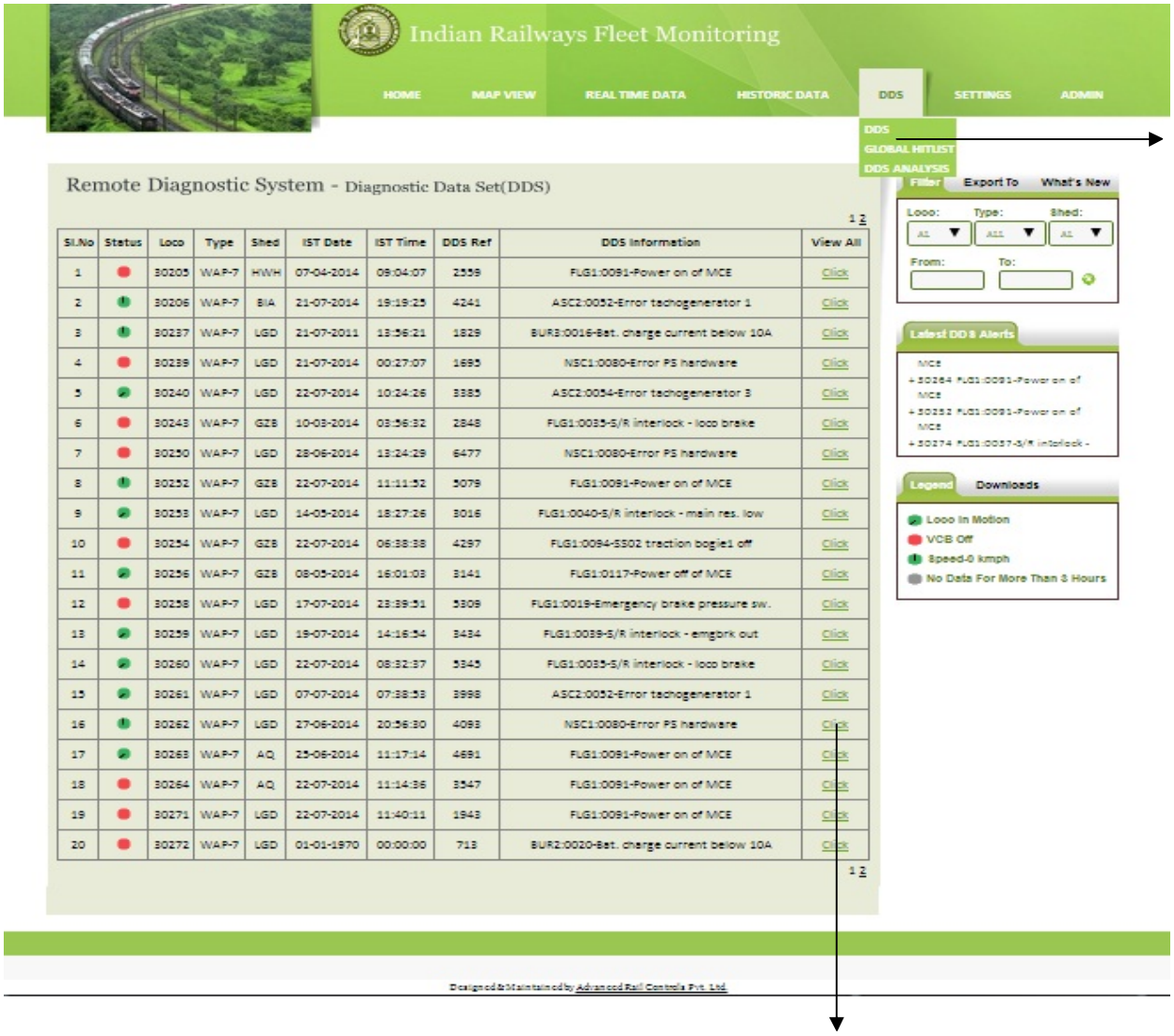
DDS Analysis Page contains various background data signal checkboxes which appears on selecting processor and message dropdown lists. Background signals that are clicked appears along with a filter button. It has a Filter button which on clicking gets redirected to **DDS ANALYSIS FILTER** page. Only5 Background Data Signals can be selected from the checkbox at once. If more than 5 Signals are selected, error message is displayed - “MAXIMUM LIMIT EXCEEDED!!!!!!!!".

DDS ANALYSIS FI LTER PAGE



DDS Analysis Filter Page displays details of selected background data signals from **DDS ANALYSIS** page.

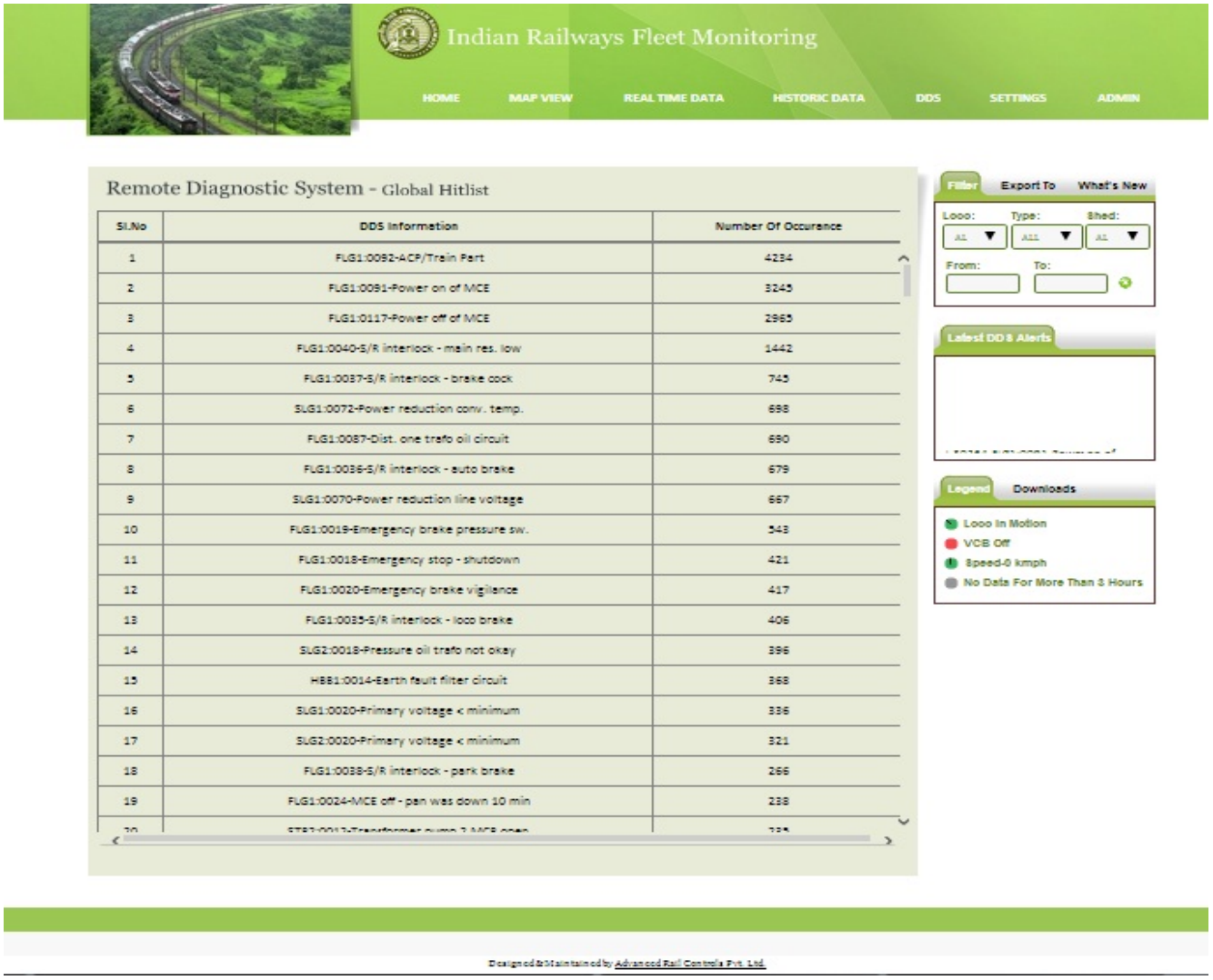
3.4 DDS PAGE



Sl.No	Status	Loco	Type	Shed	IST Date	IST Time	DDS Ref	DDS Information	View All
1		30205	WAP-7	HWH	07-04-2014	09:04:07	2559	FLG1:0091-Power on of MCE	Click
2		30206	WAP-7	BIA	21-07-2014	19:19:25	4241	ASC2:0052-Error tachogenerator 1	Click
3		30237	WAP-7	LGD	21-07-2011	13:56:21	1829	BUR3:0016-Bat. charge current below 10A	Click
4		30239	WAP-7	LGD	21-07-2014	00:27:07	1695	NSC1:0080-Error PS hardware	Click
5		30240	WAP-7	LGD	22-07-2014	10:24:26	3385	ASC2:0054-Error tachogenerator 3	Click
6		30243	WAP-7	GZB	10-03-2014	03:56:32	2848	FLG1:0035-S/R interlock - loco brake	Click
7		30250	WAP-7	LGD	28-06-2014	13:24:29	6477	NSC1:0080-Error PS hardware	Click
8		30252	WAP-7	GZB	22-07-2014	11:11:52	5079	FLG1:0091-Power on of MCE	Click
9		30253	WAP-7	LGD	14-05-2014	18:27:26	3016	FLG1:0040-S/R interlock - main res. low	Click
10		30254	WAP-7	GZB	22-07-2014	06:38:38	4297	FLG1:0094-SS02 traction bogie1 off	Click
11		30256	WAP-7	GZB	08-05-2014	16:01:03	3141	FLG1:0117-Power off of MCE	Click
12		30258	WAP-7	LGD	17-07-2014	23:39:51	5309	FLG1:0019-Emergency brake pressure sw.	Click
13		30259	WAP-7	LGD	19-07-2014	14:16:54	3434	FLG1:0039-S/R interlock - emgbrk out	Click
14		30260	WAP-7	LGD	22-07-2014	08:32:37	5345	FLG1:0035-S/R interlock - loco brake	Click
15		30261	WAP-7	LGD	07-07-2014	07:38:53	3998	ASC2:0052-Error tachogenerator 1	Click
16		30262	WAP-7	LGD	27-06-2014	20:56:30	4093	NSC1:0080-Error PS hardware	Click
17		30263	WAP-7	AQ	25-06-2014	11:17:14	4691	FLG1:0091-Power on of MCE	Click
18		30264	WAP-7	AQ	22-07-2014	11:14:36	3547	FLG1:0091-Power on of MCE	Click
19		30271	WAP-7	LGD	22-07-2014	11:40:11	1943	FLG1:0091-Power on of MCE	Click
20		30272	WAP-7	LGD	01-01-1970	00:00:00	713	BUR2:0020-Bat. charge current below 10A	Click

DDS Page displays the latest fault messages of each loco.

GLOBAL HITLIST PAGE



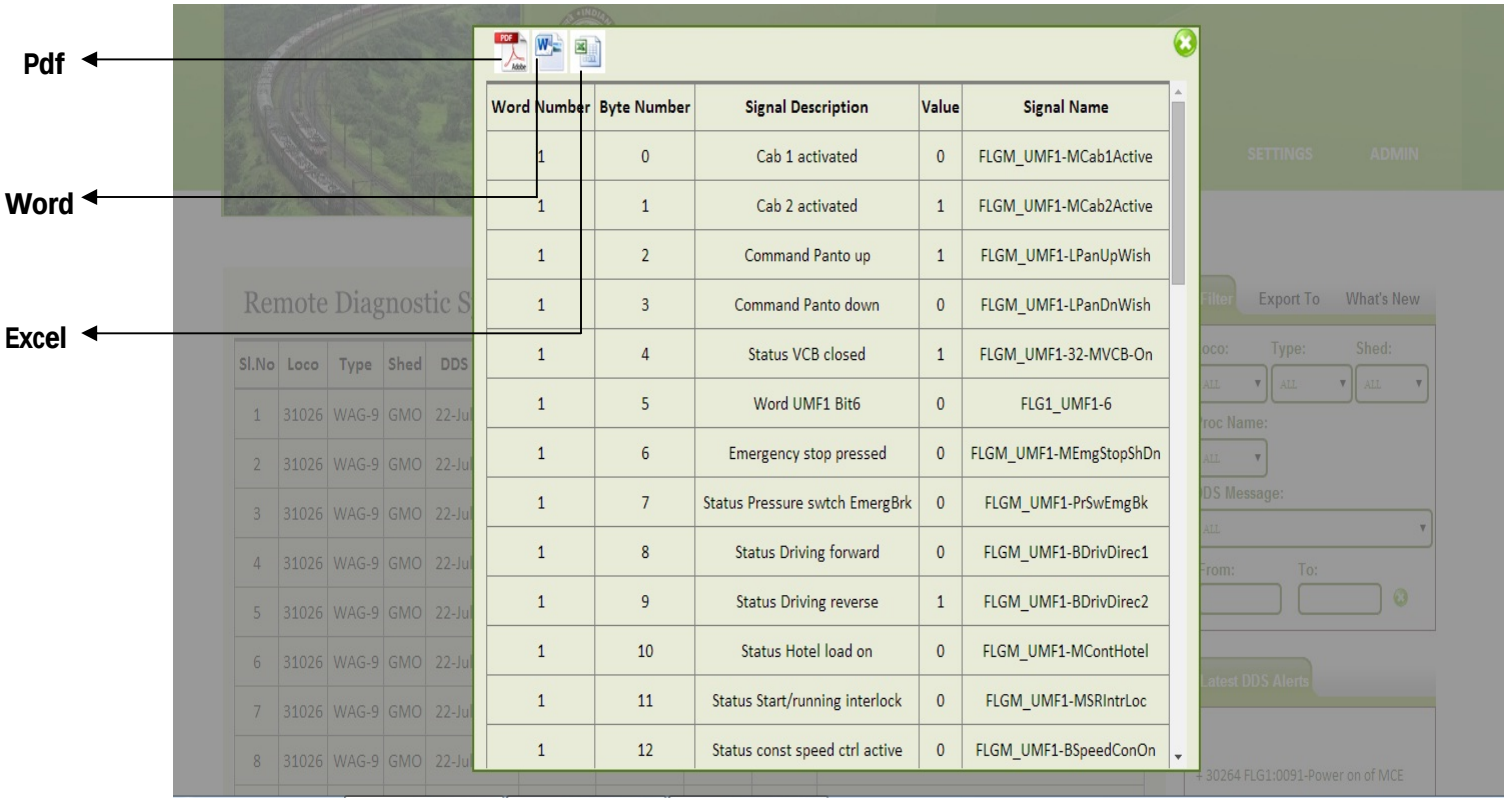
Global Hitlist Page displays number of occurrences of each DDS information of all the locos.

DDS DATA PAGE

DDS Data Page provides all the fault messages of a particular Loco. It contains Hitlist link. This can be viewed on mouse over the DDS link.

FILTER panel of first tab contains Drop down lists: Proc Name and DDS Message. Processor Dropdown List loads the processors from the database and Message Dropdown List loads the DDS messages from the database

BACKGROUND DATA PAGE

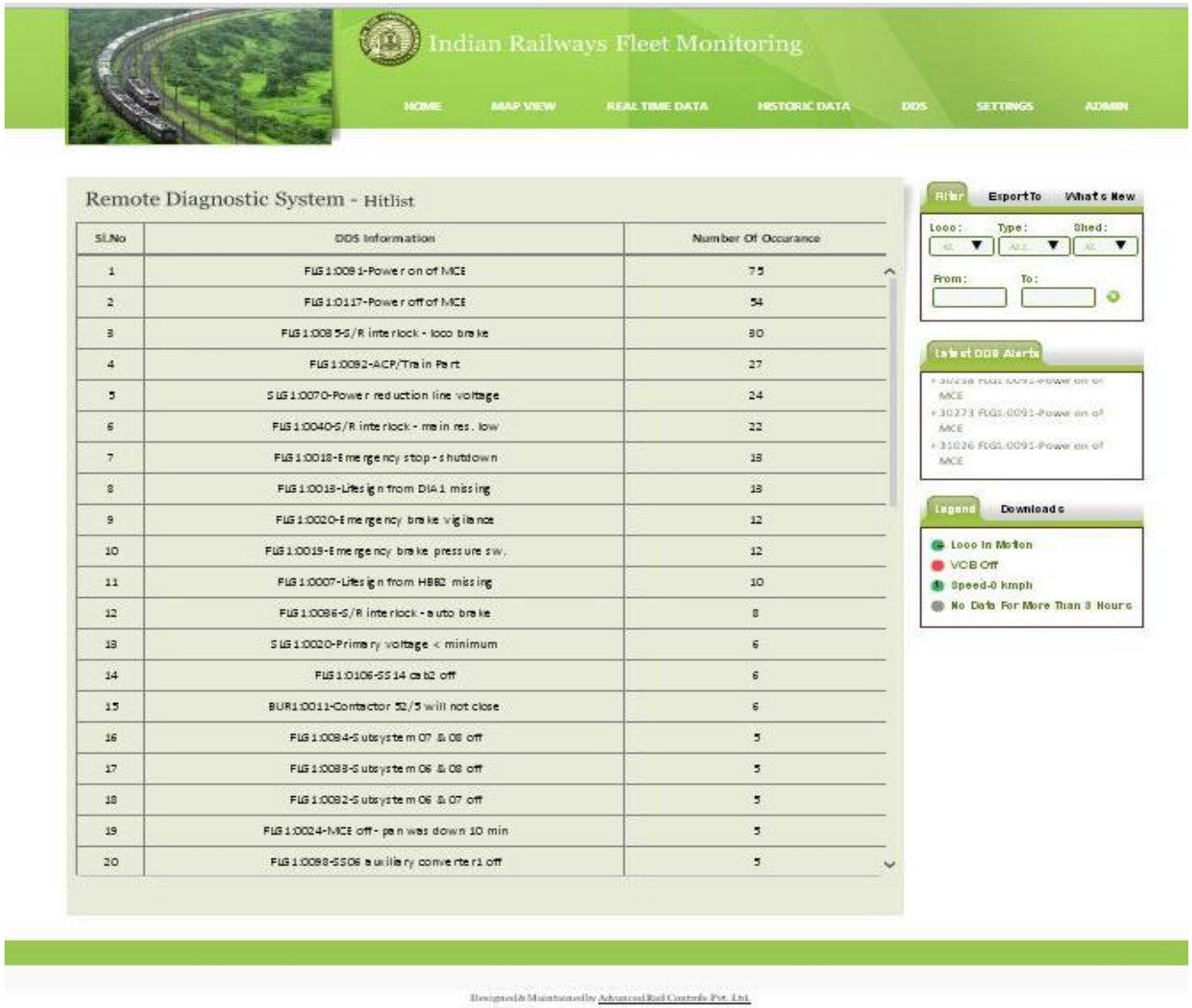


Word Number	Byte Number	Signal Description	Value	Signal Name
1	0	Cab 1 activated	0	FLGM_UMF1-MCab1Active
1	1	Cab 2 activated	1	FLGM_UMF1-MCab2Active
1	2	Command Panto up	1	FLGM_UMF1-LPanUpWish
1	3	Command Panto down	0	FLGM_UMF1-LPanDnWish
1	4	Status VCB closed	1	FLGM_UMF1-32-MVCB-On
1	5	Word UMF1 Bit6	0	FLG1_UMF1-6
1	6	Emergency stop pressed	0	FLGM_UMF1-MEmgStopShDn
1	7	Status Pressure swtch EmergBrk	0	FLGM_UMF1-PrSwEmgBk
1	8	Status Driving forward	0	FLGM_UMF1-BDrivDirec1
1	9	Status Driving reverse	1	FLGM_UMF1-BDrivDirec2
1	10	Status Hotel load on	0	FLGM_UMF1-MContHotel
1	11	Status Start/running interlock	0	FLGM_UMF1-MSRIntrLoc
1	12	Status const speed ctrl active	0	FLGM_UMF1-BSpeedConOn

Background Data Page contains Background data of the corresponding Reference number clicked in DDS Data page.

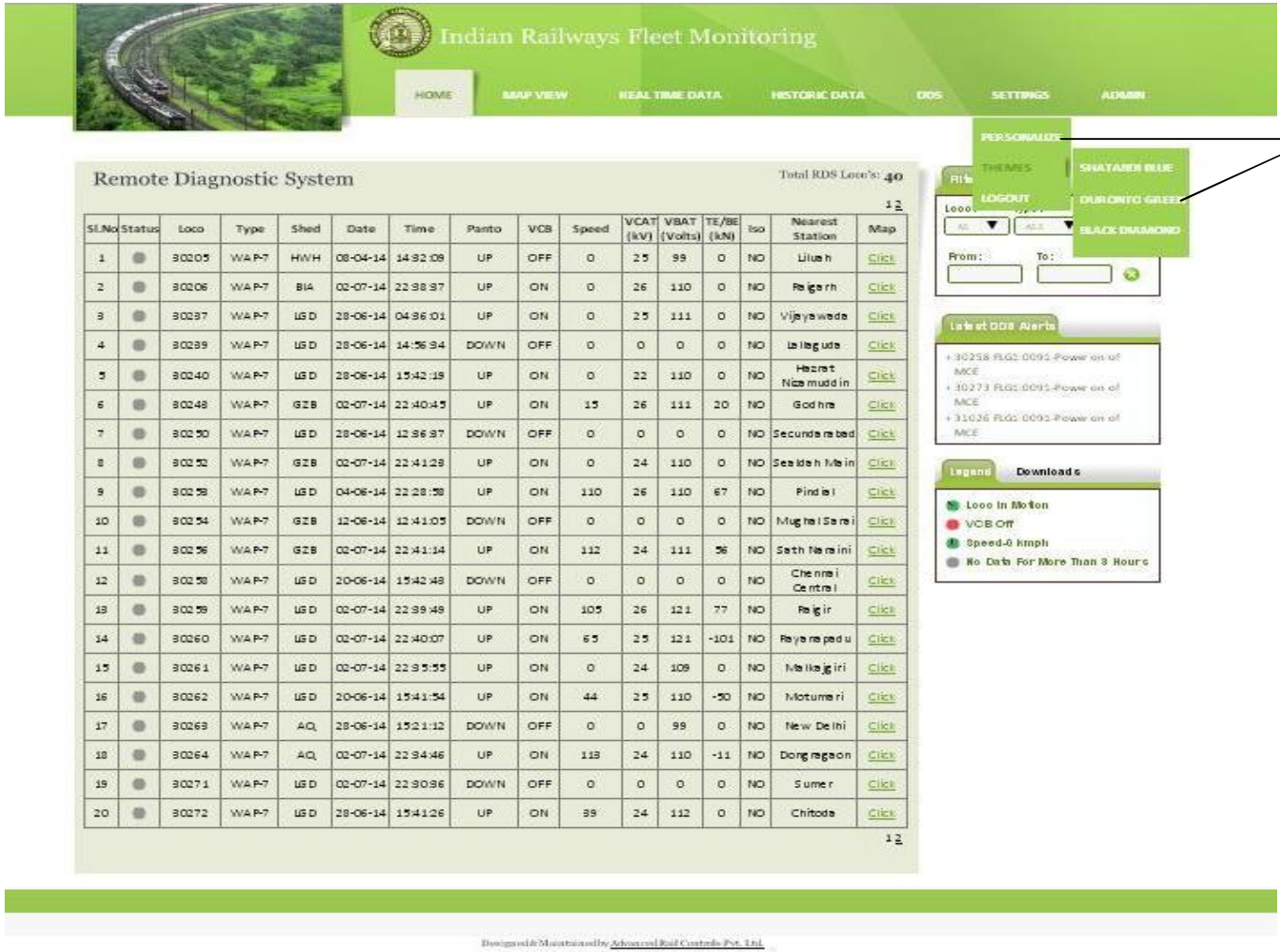
It has three Image buttons: PDF button which when clicked downloads the file in pdf format, WORD button which when clicked downloads the file in word format, EXCEL button which when clicked downloads the file in excel format.

HITLIST PAGE



Hitlist Page displays number of occurrences of each DDS information of a particular loco.

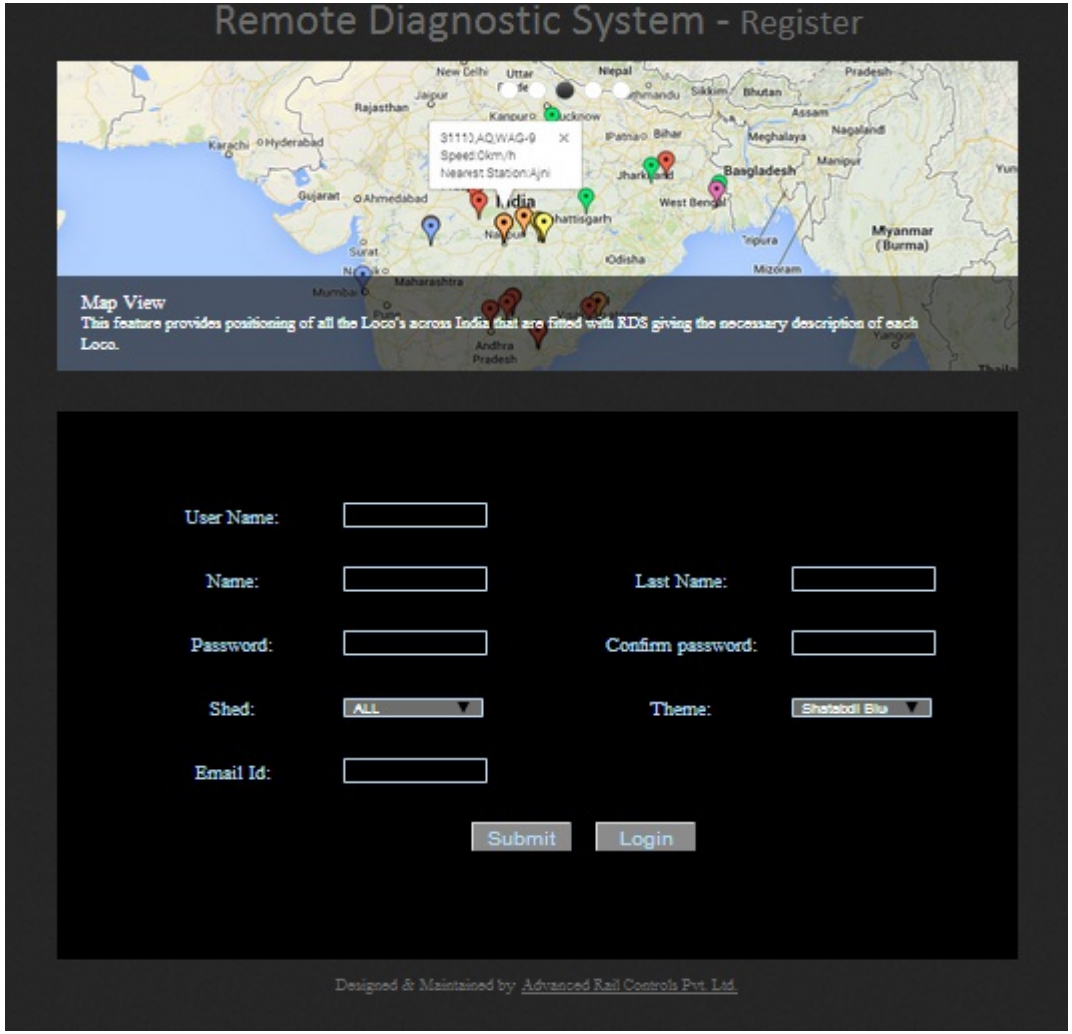
SETTINGS



Sl.No	Status	Loco	Type	Shed	Date	Time	Panto	VCB	Speed	VCAT (kV)	VBAT (Volts)	TE/BE (kN)	Iso	Nearest Station	Map
1		30205	WAP-7	HWH	08-04-14	14:32:09	UP	OFF	0	25	99	0	NO	Liluah	Click
2		30206	WAP-7	BIA	02-07-14	22:38:37	UP	ON	0	26	110	0	NO	Raigarh	Click
3		30237	WAP-7	LGD	28-06-14	04:36:01	UP	ON	0	25	111	0	NO	Vijayawada	Click
4		30239	WAP-7	LGD	28-06-14	14:56:34	DOWN	OFF	0	0	0	0	NO	Lallaguda	Click
5		30240	WAP-7	LGD	28-06-14	15:42:19	UP	ON	0	22	110	0	NO	Hazrat Nizamuddin	Click
6		30248	WAP-7	GZB	02-07-14	22:40:45	UP	ON	15	26	111	20	NO	Godhra	Click
7		30250	WAP-7	LGD	28-06-14	12:36:37	DOWN	OFF	0	0	0	0	NO	Secunderabad	Click
8		30252	WAP-7	GZB	02-07-14	22:41:29	UP	ON	0	24	110	0	NO	Sealdah Main	Click
9		30258	WAP-7	LGD	04-06-14	21:28:58	UP	ON	110	26	110	67	NO	Pindial	Click
10		30254	WAP-7	GZB	12-06-14	12:41:05	DOWN	OFF	0	0	0	0	NO	Mughal Sarai	Click
11		30256	WAP-7	GZB	02-07-14	22:41:14	UP	ON	112	24	111	56	NO	Sath Narain	Click
12		30258	WAP-7	LGD	20-06-14	15:42:48	DOWN	OFF	0	0	0	0	NO	Chennai Central	Click
13		30259	WAP-7	LGD	02-07-14	22:39:48	UP	ON	105	26	121	77	NO	Raigir	Click
14		30260	WAP-7	LGD	02-07-14	22:40:07	UP	ON	65	25	121	-101	NO	Rayanapadu	Click
15		30261	WAP-7	LGD	02-07-14	22:35:55	UP	ON	0	24	109	0	NO	Malkajgiri	Click
16		30262	WAP-7	LGD	20-06-14	15:41:54	UP	ON	44	25	110	-50	NO	Motumeri	Click
17		30263	WAP-7	ALD	28-06-14	15:21:12	DOWN	OFF	0	0	99	0	NO	New Delhi	Click
18		30264	WAP-7	ALD	02-07-14	22:34:46	UP	ON	113	24	110	-11	NO	Dongragaon	Click
19		30271	WAP-7	LGD	02-07-14	22:30:36	DOWN	OFF	0	0	0	0	NO	Sumer	Click
20		30272	WAP-7	LGD	28-06-14	15:41:26	UP	ON	99	24	112	0	NO	Chitoda	Click

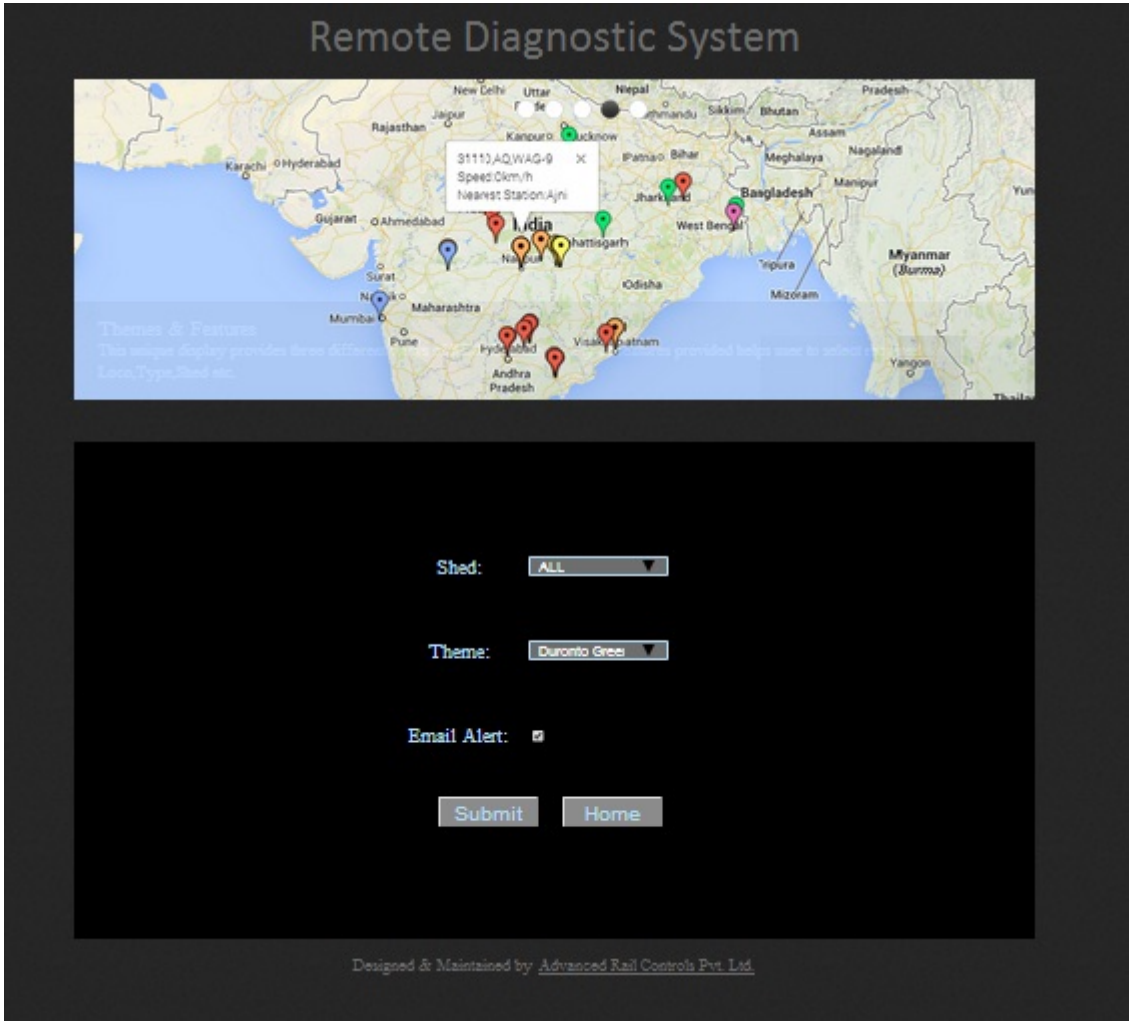
Settings link provides options to customize personal settings, change themes and to logout.

REGISTER



Register page allows users to sign in with customized settings of their own.

PERSONALIZE



Personalize page allows users to change settings done in register page.